Office Action Mailed 04/27/2006 Amendment Dated August 14, 2006

Examiner: Samuel E. Belt (Group 3746)

Docket: VOL 049 P2

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Previously Presented) A method for controlling one or more pumps in a pump sump with which each pump comprises a signal generator which switches on the pump, and each pump subsequent to its running is firstly automatically blocked by changing its switching value at which the pump is switched on by the signal generator from an initial switching value to a second switching value so that the same pump is prevented from being directly activated when again reaching said initial switching value, and depending on the running of the further pumps in the pump sump is released again.
- 2. (Previously Presented) A method for controlling one or more pumps in a pump sump with which each pump comprises a signal generator which switches on the pump, and each pump subsequent to its running is firstly automatically blocked by changing its switching value at which the pump is switched on by the signal generator so that the same pump is prevented from being directly activated when again reaching said initial switching value, and depending on the running of the further pumps in the pump sump is released again, wherein for each pump subsequent to its operation a fluid level threshold value at which the pump is started is firstly increased proceeding from an initial threshold value and depending on the running of the further pumps in the pump sump is reduced again.

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3. (Previously Presented) A method for controlling one or more pumps in a pump sump with which each pump comprises a signal generator which switches on the pump, and each pump subsequent to its running is firstly automatically blocked by changing its switching value at which the pump is switched on by the signal generator so that the same pump is prevented from being directly activated when again reaching the initial switching value, and depending on the running of the further pumps in the pump sump is released again, wherein a fluid level threshold value for each pump is reduced in steps by a predefined value after the running of a further pump.

- 4. (Previously Presented) A method according to claim 3, wherein the reduction of said fluid level threshold value is effected according to a geometric sequence.
- 5. (Previously Presented) A method according to claim 3, wherein said fluid level threshold value after the operation of a further pump is in each case reduced to a level which is dependent on the number of the previously run pumps.
- 6. (Currently Amended) A method according to claim 5, A method for controlling one or more pumps in a pump sump with which each pump comprises a signal generator which switches on the pump, and each pump subsequent to its running is firstly automatically blocked by changing its switching value at which the pump is switched on by the signal generator so that the same pump is prevented from being directly activated when again reaching the initial switching value, and depending on the running of the further pumps in the pump sump is released again, wherein a fluid level threshold value for each pump is reduced in steps by a predefined value after the running of a further pump, wherein said fluid level threshold value after the operation of a further pump is in each case reduced to a level which is dependent

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on the number of the previously run pumps; wherein said fluid level threshold value in each case is reduced to a level which corresponds to

$$x + \Delta x \bullet \frac{1}{n}$$

wherein x corresponds to the initial threshold value, Δx the amount by which said fluid level threshold value has been increased with respect to the initial threshold value, and n the number of previously run pumps.

- (Previously Presented) A method according to claim 1, wherein each pump comprises means for detecting a number of pumps applied in operation in the pump sump.
- 8. (Previously Presented) A method according to claim 7, wherein each pump by way of a sensor detects the running of a further pump and with this detects said number of applied pumps.
- 9. (Previously Presented) A method according to claim 1, wherein in each pump there is provided a level sensor.
- 10. (Previously Presented) A method for controlling one or more pumps in a pump sump with which each pump comprises a signal generator which switches on the pump, and each pump subsequent to its running is firstly automatically blocked by changing its switching value at which the pump is switched on by the signal generator so that the same pump is prevented from being directly activated when again reaching said initial switching value, and depending on the running of the further pumps in the pump sump is released again, wherein each pump after its

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own running sets the value n for a number of said one or more pumps to n = 1 and increases the value n after each running of a further pump by 1.

- 11. (Previously Presented)

 A method for controlling one or more pumps in a pump sump with which each pump comprises a signal generator which switches on the pump, and each pump subsequent to its running is firstly automatically blocked by changing its switching value at which the pump is switched on by the signal generator so that the same pump is prevented from being directly activated when again reaching said initial switching value, and depending on the running of the further pumps in the pump sump is released again, wherein the pump automatically detects a condition in which no further pumps are arranged in the pump sump, and automatically lifts their blocking.
- 12. (Previously Presented) A pump comprising a signal generator and control means for activating the pump, wherein the control means comprises a detector for detecting the operation of at least one other pump in the same pump sump, a blocking function which blocks the pump by changing its switching value from an initial switching value to a second switching value at which the pump is switched on so that the same pump is prevented from being directly activated when again reaching the initial switching value, and a release function which releases the pump again depending on the operation of further pumps in the sump pump.
- 13. (Previously Presented) A pump according to claim 12, wherein the control means comprises means for detecting the number of pumps in a pump sump.
- 14. (Previously Presented)A pump according to claim 12, wherein said pump comprises a level switch .

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15. (Previously Presented) A pump according to claim 14, wherein said blocking function increases a threshold value of said level switch and the release function reduces said threshold value of said level switch.

- 16. (Previously Presented) A pump according to claim 15, wherein the control means is designed in a manner such that the threshold value in each case after detecting the running of a further pump is reduced in steps by a predefined value.
- 17. (Previously Presented) A pump according to claim 14, wherein the means for detecting the operation of the further pumps in said pump sump accesses signals of the level switch
- 18. (Previously Presented) A pump according to claim 12, wherein the control means is integrated into said pump.
- 19. (Previously Presented) A pump with a signal generator and a control for activating a pump with an initial switching value, wherein said control comprises a detector for detecting the operation of at least one pump in the same pump sump. a blocking function which blocks the pump by changing its switching value from said initial switching value to a second value and a release function which changes said second switching valve to release the pump in response to the operation of further pumps.
- 20. (Previously presented) The pump according to claim 19, wherein said control comprises a detector for detecting a number of pumps in a pump sump.
- 21. (Previously presented) The pump according to claim 19, wherein said pump comprises a level switch comprising a pressure sensor.

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22. (Previously Presented) A pump with a signal generator and a control for activating a pump with an initial switching value, wherein said control comprises a detector for detecting the operation of at least one pump in the same pump sump, a blocking function which blocks the pump by changing its switching value from said initial switching value to a second value and a release function which changes said second switching valve to release the pump in response to the operation of further pumps:

wherein said pump comprises a level switch comprising a pressure sensor; and

wherein said blocking function increases a threshold value of said level switch and the release function reduces the threshold value of said level switch.

23. (Previously Presented) A pump with a signal generator and a control for activating a pump with an initial switching value, wherein said control comprises a detector for detecting the operation of at least one pump in the same pump sump, a blocking function which blocks the pump by changing its switching value from said initial switching value to a second value and a release function which changes said second switching valve to release the pump in response to the operation of further pumps;

wherein said pump comprises a level switch comprising a pressure sensor; wherein said blocking function increases a threshold value of said level switch and the release function reduces the threshold value of said level switch; and

wherein said control is designed in a manner such that said threshold value in each case after detecting the running of a further pump is reduced in steps by a predetermined value.

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24. (Previously presented) The pump according to claim 21 wherein said detector for detecting the operation of the further pumps in a pump sump is responsive to

25. (Previously Presented) A pump with a signal generator and a control for activating a pump with an initial switching value, wherein said control comprises a detector for detecting the operation of at least one pump in the same pump sump, a blocking function which blocks the pump by changing its switching value from said initial switching value to a second value and a release function which changes said second switching valve to release the pump in response to the operation of further pumps;

wherein said control is integrated into the pump.

signals of the level switch.

- 26. (Previously Presented) The method as recited in claim 9, wherein said level sensor is a pressure sensor.
- 27. (Previously Presented) The pump as recited in claim 14, wherein said level switch is a pressure sensor.